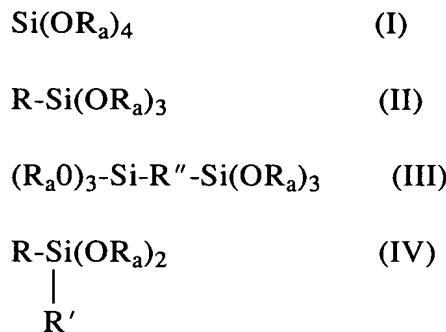


WHAT IS CLAIMED IS:

1. A photostable UV-photoprotecting amount of at least one dibenzoylmethane organic sunscreen immobilized within a matrix prepared via sol-gel process from at least one silicon alkoxide, at least one non-ionic surfactant and water, but in the absence of any organic solvent.
5
2. The matrix-immobilized dibenzoylmethane sunscreen as defined by Claim 1, said at least one dibenzoylmethane sunscreen being selected from the group consisting of:
10
2-methyldibenzoylmethane,
4-methyldibenzoylmethane,
4-isopropyldibenzoylmethane,
4-tert-butyldibenzoylmethane,
15
2,4-dimethyldibenzoylmethane,
2,5-dimethyldibenzoylmethane,
4,4'-diisopropyldibenzoylmethane,
4,4'-dimethyldibenzoylmethane,
4-tert-butyl-4'-methoxydibenzoylmethane,
20
2-methyl-5-isopropyl-4'-methoxydibenzoylmethane,
2-methyl-5-tert-butyl-4'-methoxydibenzoylmethane,
2,4-dimethyl-4'-methoxydibenzoylmethane, and
2,6-dimethyl-4-tert-butyl-4'-methoxydibenzoyl-methane.
25
3. The matrix-immobilized dibenzoylmethane sunscreen as defined by Claim 2, said at least one dibenzoylmethane sunscreen comprising 4-tert-butyl-4'-methoxydibenzoylmethane.
4. The matrix-immobilized dibenzoylmethane sunscreen as defined by

Claim 1, said at least one silicon alkoxide having one of the following formulae (I), (II), (III) or (IV):



5 in which R_a is a linear or branched, C₁-C₃₀ alkyl radical; R and R', which may be identical or different, are each a linear or branched alkyl radical, a cycloalkyl radical, a substituted or unsubstituted aryl radical, or said radicals R and R' may be a cosmetically or dermatologically active substituent; and R'' is a linear or branched alkylene radical, a cycloalkylene radical, a substituted or unsubstituted 10 arylene radical, or R'' may be a cosmetically or dermatologically active substituent.

5. The matrix-immobilized dibenzoylmethane sunscreen as defined by Claim 4, said at least one silicon alkoxide comprising tetra-ethoxysilane or 15 methyltriethoxysilane.

6. The matrix-immobilized dibenzoylmethane sunscreen as defined by Claim 1, said at least one non-ionic surfactant being selected from the group consisting of polyethoxylated, polypropoxylated or polyglycerolated fatty alcohols, 20 alkylphenols or acids comprising a fatty chain having from 6 to 32 carbon atoms, the number of ethylene oxide or propylene oxide structural units ranging from 2 to 100, and the number of glycerol structural units ranging from 2 to 30.

7. The matrix-immobilized dibenzoylmethane sunscreen as defined by
Claim 6, said at least one non-ionic surfactant comprising a polyethoxylated 4-
(1,1,3,3-tetramethylbutyl)phenol.

5 8. A process for immobilizing and photostabilizing at least one
dibenzoylmethane organic sunscreen within a sol-gel matrix, comprising admixing
same with at least one non-ionic surfactant, at least one silicon alkoxide and water,
in an amount and for such period of time sufficient for the partial or total
hydrolysis of said at least one silicon alkoxide and condensation thereof, but in the
10 absence of any organic solvent therefor.

9. The process as defined by Claim 8, the amount of said at least one
dibenzoylmethane organic sunscreen ranging from 0.1% to 20% by weight,
relative to the weight of said at least one silicon alkoxide.

15 10. The process as defined by Claim 8, the amount of said at least one
dibenzoylmethane organic sunscreen ranging from 0.5% to 10% by weight,
relative to the weight of said at least one silicon alkoxide.

20 11. The process as defined by Claim 8, the weight ratio of said at least one
surfactant to said at least one silicon alkoxide ranging from 0.01 to 99.

12. The process as defined by Claim 8, the weight ratio of said at least one
surfactant to said at least one silicon alkoxide ranging from 1 to 60.

25 13. The process as defined by Claim 8, the water containing a cosmetically
acceptable mineral or organic acid.

14. The process as defined by Claim 8, the water of hydrolysis having a pH ranging from 1 to 4.

5 15. The process as defined by Claim 8, the water of hydrolysis having a pH ranging from 1 to 2.

10 16. The process as defined by Claim 13, comprising introducing said at least one silicon alkoxide into admixture of said at least one dibenzoylmethane sunscreen and said at least one non-ionic surfactant, and thence adding said acidified water thereto.

15 17. A photoprotective cosmetic/dermatological composition suited for the UV-photoprotection of the skin, hair, nails, eyebrows, eyelashes and/or lips, comprising an effective photostable and UV-photoprotecting amount of at least one dibenzoylmethane organic sunscreen immobilized within a matrix prepared via sol-gel process from at least one silicon alkoxide, at least one non-ionic surfactant and water, but in the absence of any organic solvent, formulated into a topically applicable, cosmetically/dermatologically acceptable medium therefor.

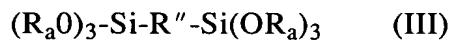
20 18 The cosmetic/dermatological composition as defined by Claim 17, said at least one dibenzoylmethane sunscreen being selected from the group consisting of:
2-methyldibenzoylmethane,
4-methyldibenzoylmethane,
4-isopropyldibenzoylmethane,
25 4-tert-butyldibenzoylmethane,
2,4-dimethyldibenzoylmethane,
2,5-dimethyldibenzoylmethane,
4,4'-diisopropyldibenzoylmethane,
4,4'-dimethyldibenzoylmethane,

4-tert-butyl-4'-methoxydibenzoylmethane,
2-methyl-5-isopropyl-4'-methoxydibenzoylmethane,
2-methyl-5-tert-butyl-4'-methoxydibenzoylmethane,
2,4-dimethyl-4'-methoxydibenzoylmethane, and
5 2,6-dimethyl-4-tert-butyl-4'-methoxydibenzoyl-methane.

19. The cosmetic/dermatological composition as defined by Claim 18, said at least one dibenzoylmethane sunscreen comprising 4-tert-butyl-4'-methoxydibenzoylmethane.

10

20. The cosmetic/dermatological composition as defined by Claim 17, said at least one silicon alkoxide having one of the following formulae (I), (II), (III) or (IV):



15

in which R_a is a linear or branched, $\text{C}_1\text{-C}_{30}$ alkyl radical; R and R' , which may be identical or different, are each a linear or branched alkyl radical, a cycloalkyl radical, a substituted or unsubstituted aryl radical, or said radicals R and R' may be a cosmetically or dermatologically active substituent; and R'' is a linear or branched alkylene radical, a cycloalkylene radical, a substituted or unsubstituted arylene radical, or R'' may be a cosmetically or dermatologically active substituent.

21. The cosmetic/dermatological composition as defined by Claim 20, wherein formulae (I), (II), (III) or (IV), R_a is a C₁-C₆ alkyl radical.

22. The cosmetic/dermatological composition as defined by Claim 20, said at 5 least one silicon alkoxide comprising tetra-ethoxysilane or methyltriethoxysilane.

23 The cosmetic/dermatological composition as defined by Claim 17, said at least one non-ionic surfactant being selected from the group consisting of polyethoxylated, polypropoxylated or polyglycerolated fatty alcohols, alkylphenols 10 or acids comprising a fatty chain having from 6 to 32 carbon atoms, the number of ethylene oxide or propylene oxide structural units ranging from 2 to 100, and the number of glycerol structural units ranging from 2 to 30.

24 The cosmetic/dermatological composition as defined by Claim 23, said at 15 least one non-ionic surfactant comprising a polyethoxylated 4-(1,1,3,3-tetramethylbutyl)phenol.

25. The cosmetic/dermatological composition as defined by Claim 17, said matrix-immobilized dibenzoylmethane sunscreen comprising from 1% to 99% by 20 weight, relative to the total weight of the composition.

26. The cosmetic/dermatological composition as defined by Claim 17, said matrix-immobilized dibenzoylmethane sunscreen comprising from 1% to 60% by weight, relative to the total weight of the composition.

25

27. The cosmetic/dermatological composition as defined by Claim 17, further comprising at least one additional organic sunscreen active in the UV-A and/or UV-B region, selected from the group consisting of anthranilates; salicylic derivatives; cinnamic derivatives; camphor derivatives; triazine derivatives;

benzophenone derivatives; aminated 2-hydroxybenzophenones; β,β' -diphenylacrylate derivatives; benzotriazole derivatives; benzalmalonate derivatives; benzimidazole derivatives; imidazolines; bis(benzoazolyl) derivatives; p-aminobenzoic acid (PABA) derivatives; methylene-
5 bis(hydroxyphenylbenzotriazole) derivatives; hydrocarbon polymer UV-filters and silicone UV-filters; alkylstyrene derivatives; and mixtures thereof.

28. The cosmetic/dermatological composition as defined by Claim 27, said at least one additional organic sunscreen being selected from the group consisting of:
10 Ethylhexyl Salicylate,
Octocrylene,
Phenylbenzimidazole Sulfonic Acid,
Terephthalylidene Dicamphor Sulfonic Acid,
4-Methylbenzylidene Camphor,
15 Anisotriazine,
Ethylhexyl Triazole,
Diethylhexyl Butamido Triazole,
2,4,6-Tris-(diisobutyl-4'-aminobenzalmalonate)-s-triazine,
Benzophenone-3,
20 Benzophenone-4,
Benzophenone-5,
n-Hexyl 2-(4-diethylamino-2-hydroxybenzoyl)-benzoate,
Methylene bis-Benzotriazolyl Tetramethylbutyl-phenol,
Drometrizol Trisiloxane,
25 Disodium Phenyl Dibenzimidazole Tetrasulfonate, and mixtures thereof.

29. The cosmetic/dermatological composition as defined by Claim 17, further comprising pigments or nanopigments of coated or uncoated metal oxides.

30. The cosmetic/dermatological composition as defined by Claim 17, further comprising at least one cosmetic additive selected from the group consisting of fatty substances, organic solvents, ionic or non-ionic thickeners, softeners, antioxidants, agents for combating free radicals, opacifiers, stabilizers, emollients, 5 silicones, α -hydroxy acids, anti-foaming agents, moisturizing agents, vitamins, insect repellents, perfumes, preservatives, anionic, cationic, amphoteric or non-ionic surfactants, anti-inflammatories, substance P antagonists, fillers, sequestering agents, polymers, propellants, basifying or acidifying agents, dyes, colorants, and mixtures thereof.

10 31. The cosmetic/dermatological composition as defined by Claim 17, formulated as a non-ionic dispersion, emulsion, cream, gel, gel-cream, milk, stick, powder, pomade, foam or spray.

15 32. The cosmetic/dermatological composition as defined by Claim 17, formulated as a shampoo or rinse.

33. The cosmetic/dermatological composition as defined by Claim 17, formulated as a makeup.

20 34. A regime or regimen for photoprotecting the skin, hair, nails, eyebrows, eyelashes and/or lips against the damaging effects of UV radiation, comprising topically applying thereon a photoprotective cosmetic/dermatological composition comprising an effective photostable and UV-photoprotecting amount of at least one dibenzoylmethane organic sunscreen immobilized within a matrix prepared via sol-gel process from at least one silicon alkoxide, at least one non-ionic surfactant and water, but in the absence of any organic solvent, formulated into a topically applicable, cosmetically/dermatologically acceptable medium therefor.

25